

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An image forming apparatus, comprising:
a roller having a central portion and an outer edge portion;
a fusing belt positioned over at least a portion of the central portion of the roller; and
a belt regulating part, positioned on the outer edge portion of the roller, that impedes the fusing belt from moving onto the outer edge portion of the roller, the belt regulating part comprising:
a first portion having a surface adjacent to the central portion of the roller and an edge of the fusing belt, the first portion is configured to contact the fusing belt if the fusing belt moves toward the outer edge portion of the roller; and
a second portion coupled to the first portion, the second portion having an interior surface that contacts with the outer edge portion of the roller during operation of the image forming apparatus to cause the regulating part to rotate in conjunction with the rotation of the roller and the fusing belt,
wherein the interior surface of the second portion of the belt regulating part includes at least one contact region which contacts an exterior surface of the edge portion of the roller during the operation of the image forming apparatus, and
wherein the edge portion of the roller thermally expands during the operation of the image forming apparatus, and the at least one contact region contacts the exterior surface of the outer edge portion of the roller and belt regulating part deforms.

2. Cancel

3. (Currently Amended) An image forming apparatus according to claim 1, comprising:
a roller having a central portion and an outer edge portion;
a fusing belt positioned over at least a portion of the central portion of the roller; and

a belt regulating part, positioned on the outer edge portion of the roller, that impedes the fusing belt from moving onto the outer edge portion of the roller, the belt regulating part comprising:

a first portion having a surface adjacent to the central portion of the roller and an edge of the fusing belt, the first portion is configured to contact the fusing belt if the fusing belt, the first portion is configured to contact the fusing belt if the fusing belt moves toward the outer edge portion of the roller; and

a second portion coupled to the first portion, the second portion having an interior surface that contacts with the outer edge portion of the roller during operation of the image forming apparatus to cause the regulating part to rotate in conjunction with the rotation of the roller and the fusing belt,

wherein the interior surface of the second portion the belt regulating part includes at least one contact region, and

wherein a circumference of an interior surface of the second portion of the belt regulating part is greater than a circumference of the outer edge of the roller during a time when the image forming apparatus is not operating.

4. Cancel

5. Cancel

6. Cancel

7. (Currently Amended) An image forming apparatus according to claim 3, comprising:

a roller having a central portion and an outer edge portion;

a fusing belt positioned over at least a portion of the central portion of the roller; and

a belt regulating part, positioned on the outer edge portion of the roller, that impedes the fusing belt from moving onto the outer edge portion of the roller, the belt regulating part comprising:

a first position having a surface adjacent to the central portion of the roller and an edge of the fusing belt, the first portion is configured to contact the fusing belt if the fusing belt moves toward the outer edge portion of the roller, and

a second portion coupled to the first portion, the second portion having an interior surface that contacts with the outer edge portion of the roller during operation of the image forming apparatus to cause the regulating part to rotate in conjunction with the rotation of the roller and the fusing belt,

wherein the interior surface of the second portion of the belt regulating part includes at least one contact region which comprises a plurality of rib portions, and

wherein at least one rib portion of the plurality of rib portions does not contact an exterior surface of the edge portion of the roller when the image forming apparatus is not operating.

8. (Original) An image forming apparatus according to claim 7, wherein the plurality of rib portions comprises at least three rib portions.

9. (Original) An image forming apparatus according to claim 7, wherein only the plurality of rib portion contact the roller when the image forming apparatus is operating.

10. Cancel

11. Cancel

12. (Currently Amended) An image forming apparatus ~~according to claim 1, comprising:~~

a roller having a central portion and an outer edge portion;

a fusing belt positioned over at least a portion of the central portion of the roller; and

a belt regulating part, positioned on the outer edge portion of the roller, that impedes the fusing belt from moving onto the outer edge portion of the roller, the belt regulating part comprising:

a first portion having a surface adjacent to the central portion of the roller and an edge of the fusing belt, the first portion is configured to contact the fusing belt if the fusing belt moves toward the outer edge portion of the roller; and

a second portion coupled to the first portion, the second portion having an interior surface that contacts with the outer edge portion of the roller during operation of the image forming apparatus to cause the regulating part to rotate in conjunction with the rotation of the roller and the fusing belt,

wherein the second portion of the belt regulating part includes an interior section, an exterior section, and a bridge portion that couples the interior section to the exterior section.

13. (Original) An image forming apparatus according to claim 12, wherein the interior section is formed of a thermally expandable material, and the bridge portion is formed of a compressible material.

14. (Original) An image forming apparatus according to claim 12, wherein the interior section contacts the outer edge portion of the roller during the operation of the image forming apparatus.

15. (Original) An image forming apparatus according to claim 14, wherein the outer edge portion of the roller thermally expands during the operation of the image forming apparatus to cause the interior section to radially expand and compress the bridge portion.

16. (Original) An image forming apparatus according to claim 12, wherein a thermal expansion property of the belt regulating part is different than a thermal expansion property of the roller.

17. (Currently Amended) An image forming apparatus ~~according to claim 1, comprising:~~

a roller having a central portion and an outer edge portion;

a fusing belt positioned over at least a portion of the central portion of the roller; and

a belt regulating part, positioned on the outer edge portion of the roller, that impedes the fusing belt from moving onto the outer edge portion of the roller, the belt regulating part comprising:

a first portion having a surface adjacent to the central portion of the roller and an edge of the fusing belt, the first portion is configured to contact the fusing belt if the fusing belt moves toward the outer edge portion of the roller; and

a second portion coupled to the first portion, the second portion having an interior surface that contacts with the outer edge portion of the roller during operation of the image forming apparatus to cause the regulating part to rotate in conjunction with the rotation of the roller and the fusing belt,

wherein an exterior surface of the outer edge portion of the roller includes an extension rib, and the second portion of the belt regulating part includes a cooperating extension rib on an interior surface.

18. (Original) An image forming apparatus according to claim 17, wherein rotation of the roller during operation of the image forming apparatus causes the extension rib of the roller to contact the cooperating extension rib of the belt regulating part to rotate the belt regulating part in conjunction with the rotation of the roller.

19. (Currently Amended) An image forming apparatus ~~according to claim 1,~~ comprising:

a roller having a central portion and an outer edge portion;
a fusing belt positioned over at least a portion of the central portion of the roller; and
a belt regulating part, positioned on the outer edge portion of the roller, that impedes the fusing belt from moving onto the outer edge portion of the roller, the belt regulating part comprising:

a first portion having a surface adjacent to the central portion of the roller and an edge of the fusing belt, the first portion is configured to contact the fusing belt if the fusing belt moves toward the outer edge portion of the roller; and

a second portion coupled to the first portion, the second portion having an interior surface that contacts with the outer edge portion of the roller during operation

of the image forming apparatus to cause the regulating part to rotate in conjunction with the rotation of the roller and the fusing belt,

wherein a thermal expansion property of the belt regulating part is different than a thermal expansion property of the roller.

20. (New) An image forming apparatus, comprising:

a roller having a central portion and an outer edge portion;

a fusing belt positioned over at least a portion of the central portion of the roller; and

a belt regulating part, positioned on the outer edge portion of the roller, that impedes the fusing belt from moving onto the outer edge portion of the roller, the belt regulating part comprising:

a first portion having a surface adjacent to the central portion of the roller and an edge of the fusing belt, the first portion is configured to contact the fusing belt if the fusing belt moves toward the outer edge portion of the roller; and

a second portion coupled to the first portion, the second portion having an interior surface that contacts with the outer edge portion of the roller during operation of the image forming apparatus to cause the regulating part to rotate in conjunction with the rotation of the roller and the fusing belt,

wherein the belt regulating part comprises a plurality of ribs provided on the interior surface of the second portion and is kept rotation free, and wherein the belt regulating part is rotated synchronously with the roller when the fusing belt contacts the first portion by moving along the outer edge portion of the roller.

21. (New) An image forming apparatus according to claim 20, further comprising a stopper positioned on the outer edge portion of the roller, axially outside the belt regulating part along the outer edge portion of the roller, to maintain the position of the belt regulating part on the outer edge portion of the roller.